

# ABSTRACT OF THE DISCLOSURE

Piezoelectric elements 10 and 10' are driven so as to satisfy the relationship

$$Nt=X0(1/(1/k2+1/k3)-1/(1/k1+1/k2+1/k3))$$

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when the drive member, tip 20, and driven member, rotor 40, are in a state of intermittent contact, and in a state near the condition of transition from the intermittent contact state to the normal contact state.

When the spring constant of the spring 41 is designated  $k1$ , the spring constant of the combined piezoelectric elements 10 and 10' and the tip 20 is designated  $k2$ , the spring constant of the rotor 40 is designated  $k3$ , the amount of displacement of the piezoelectric elements 10 and 10' is designated  $X0$ , and the compression force of the spring 41 is designated  $Nt$ .

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